

Claims

[1] A discharge device, which includes a discharge electrode including a plurality of discharge parts and a counter electrode including a plurality of counter parts confronting the discharge parts, for performing streamer discharge by applying voltage to both the electrodes by power source means, characterized in that:

a resistor is provided in a current carrying path between the power source means and the discharge parts.

[2] The discharge device of Claim 1,

wherein the resistor is made of a conductive resin material, and the resin material melts at a temperature lower than an ignition temperature thereof.

[3] The discharge device of Claim 1,

wherein the resistor is made of an electrically diffusible material.

[4] The discharge device of any one of Claims 1 to 3,

wherein the discharge electrode includes a discharge side support member for supporting the plurality of discharge parts, and

the discharge side support member is composed of the resistor.

[5] The discharge device of Claim 4,

wherein the discharge electrode includes the plurality of discharge parts and a plurality of discharge side support members for supporting the discharge parts.

[6] The discharge device of Claim 1,

wherein the plurality of discharge parts are held by a discharge side support

member,

the discharge side support member is provided with a resin material that melts at a temperature lower than an ignition temperature thereof,

5 a conductive part for allowing the discharge parts to be conductive with the power source means is formed in the resin material, and
the resistor is provided at the conductive part.

[7] A discharge device, which includes a discharge electrode including a plurality of discharge parts and a counter electrode including a plurality of counter parts confronting
10 the discharge parts, for performing streamer discharge by applying voltage to both the electrodes by power source means, characterized in that:

a resistor is provided in a current carrying path between the power source means and the counter parts.

15 [8] The discharge device of Claim 7,
wherein the resistor is made of a conductive resin material, and
the resin material melts at a temperature lower than an ignition temperature thereof.

20 [9] The discharge device of Claim 7,
wherein the resistor is made of an electrically diffusible material.

[10] The discharge device of any one of Claims 7 to 9,
wherein the counter electrode includes a counter side support member for
25 supporting the plurality of counter parts, and
the counter side support member is composed of the resistor.

[11] The discharge device of Claim 10,
wherein the counter electrode includes the plurality of counter parts and a plurality of counter side support members for supporting the counter parts.

5 [12] The discharge device of Claim 7,
wherein the counter electrode is provided with a resin material that melts at a temperature lower than an ignition temperature thereof,
a conductive part for allowing the counter parts to be conductive with the power source means is formed at the resin material, and
10 the resistor is provided at the conductive part.

[13] An air purifier, which includes a discharge device for performing streamer discharge between a discharge electrode and a counter electrode, for performing air purification of to-be-treated air by allowing the to-be-treated air to flow between the
15 electrodes, characterized in that:
the discharge device is the discharge device of any one of Claims 1 to 12.